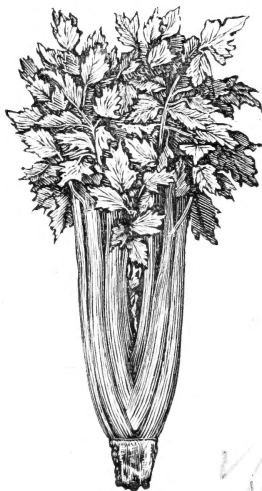


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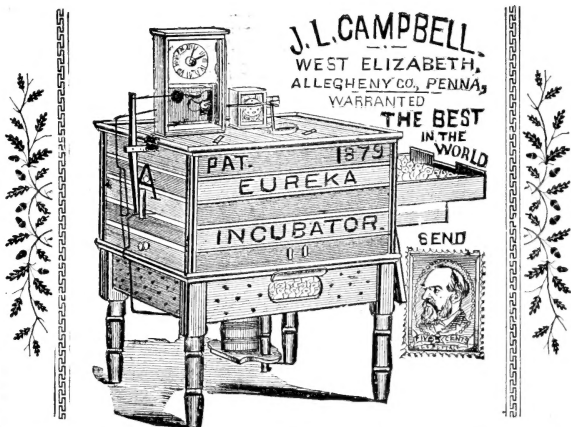
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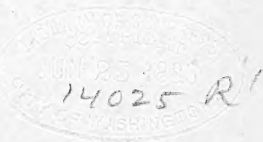
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KALAMAZOO PUBLISHING CO., PRINTERS AND BINDERS.

1886.

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## PREFACE.

Kalamazoo has no successful competitor in Celery Culture, either for quality or quantity produced. The celebrity of Kalamazoo celery has awakened so great an interest and desire to imitate, that inquiries, received (from almost every section of the country) by the principal shippers at this point regarding its cultivation, are becoming a serious burden if any attention whatever is paid to them. At best these inquiries could be answered only to a very limited extent.

To meet the emergency we have published this book, "How to Grow Celery," being a complete exposition of the methods of successful celery growing in this "Famous Kalamazoo Celery" district.

It is the design of this book not only to thoroughly instruct the general farmer who is entirely unacquainted with celery growing, but also to serve as a guide and reference book for the experienced gardener already engaged in celery culture. It gives in minute detail plain, practical and explicit directions for the cultivation and management of the crop, from time of selecting the soil to shipping or preparing for market, and will more fully meet the general demands for information than any amount of correspondence or previous works on the subject.

KALAMAZOO CELERY CO.

## ORIGIN AND DEVELOPMENT.

Celery, a plant of the parsley family, was originally found in its wild state throughout the ditches of Europe, in a rank, coarse and even poisonous condition, but through cultivation is rendered more mild in flavor, becoming sweet, crisp and juicy. As now known, is one of the most agreeable relishes cultivated, being a leading table ornament, not only in the best hotels, but private tables as well; and is recommended by physicians as one of the greatest nervines yet discovered.

## VARIETIES OF CELERY.

Market gardeners generally confine themselves to growing one or two varieties known to be good—the point being to put on the market an article pleasing to the eye, tender, crisp and solid. The dwarf sorts now are more extensively raised than the large, for the reason that in quality they are every way as good, take less field space, have more heart, and give as much blanched celery to the root as large varieties, besides being easier to work.

**Golden Dwarf.**—For general purposes this is probably the most desirable; it is a very distinct variety, which originated near Newark, N. J., a few years ago, and whose great value has been shown by the fact that it is now grown probably to a greater extent than any other single variety.

When bleached the heart is large and full, of a waxy golden yellow, rendering it a most striking and showy variety. It is solid and most excellent flavor, and one of the best keepers during winter.

**Half Dwarf.**—When bleached it is of a yellowish white, making it very ornamental for the table, possessing a rich nutty flavor. It has much vigor of growth, surpassing most of the large growing sorts in weight of bunch when grown under the same conditions.

**White Walnut.**—Of dwarf habit, seldom attaining a height of more than twenty inches, is solid and heavy and has a rich walnut-like flavor.

**Dwarf White.**—A good market variety of close habit, solid, crisp and tender.

**Sandringham Dwarf White.**—Solid and has a fine flavor.

**Giant White Solid.**—Of large size and crisp.

**Boston Market.**—A dwarf growing variety, having a sweetish taste, agreeable to some people.

**Perfection Heartwell.**—A strong growing variety, not so desirable as some others, though it answers for light and poor soils.

**White Plume.**—The peculiarity is that naturally its stalks and portions of its inner leaves are white : so that by closing the stalks, either by

tying them up with matting, or by drawing the soil up against the plants and pressing it together with the hands and again drawing up the earth with the hoe or plough so as to keep the soil that has been pressed against the celery in its place, completes the work of blanching.

With the unskilled amateur growing a few hundred plants for private use, the troublesome process of banking has usually been a sufficient hindrance to prevent him from trying. Though with this new self-bleaching sort he has something that can be grown just as easily as any other vegetable. But for an extensive grower who wishes to devote time, and secure the best results, it is advisable to take some of the other varieties, as the White Plume is liable to be rather dry, stringy and coarse. This not to any alarming extent, but sufficient to lose sale when other celery is to be had in place, besides it cannot be got ready for use until later than other varieties, and is unfit for winter storing on account of its liability to rot.

## THE RED VARIETIES.

As yet are little used in this country, though the flavor is better, and the plant altogether hardier than the white.

**London Red.**—This variety is one of the best of its class, having every requisite of good quality.

**New Rose.**—A red variety, possessing a delicacy of shading in the beautiful rose coloring of the heart and stems that give something entirely distinct and valuable in this variety.

**Major Clark's Pink.**—Of medium growth, of stiff, close habit, large heart, remarkably solid and crisp, of fine walnut flavor.

**Hood's Dwarf Red.**—An excellent dwarf of this variety, solid and crisp.

## SOIL.

It is possible to grow celery on almost any soil, but as the work of banking can be done to better advantage on a moist, mucky soil, it is generally preferred. However, if quality were the principal object, with no regard to economizing labor, a high sandy soil might be selected. A swamp which, when drained, bears good grass, and not smartweed, will grow good celery. Muck that will grow onions or potatoes will grow an added crop of celery the same season; of sandy loam the same thing can also be said. To prepare a muck field from the rough swamp is sometimes very expensive, but on such ground celery grows luxuriantly with a minimum of cultivation.

## PREPARING THE GROUND.

Celery requires an abundance of manure which,

as usual with all crops, must be well mixed and incorporated with the soil before celery is set out. In preparing the ground for the reception of the plants, if it has not been plowed the fall previous, which is always beneficial—not only that when thus thrown up in ridges it gets pulverized (a matter of utmost importance) by the action of the frost, but also that the turning up of the soil exposes the larvæ and eggs of insects to the frost, which tends greatly to lessen their numbers the succeeding year. Plowing should be begun as soon as the ground is dry enough to work. The land should be manured broadcast with well rotted stable manure. This is cultivated or forked in. From 25 to 50 two-horse wagon loads of manure to the acre should be used; the more the better. Concentrated fertilizers should not be employed if manure is obtainable.

If the quantity of manure is short, or the ground is turfy, the plan of making trenches can be resorted to, which is throwing out a trench about ten inches wide, and six to eight inches deep and spreading about two inches of well rotted manure in the bottom, and on this four or five inches of well pulverized soil, which should be well firmed down by tramping.

Preparation of the ground should always include some plan for providing moisture, especially if in a section where dry weather prevails through August.

## THE SEED PLANTING.

There is no need of getting seed in very early, except to let it get the start of weeds and the benefit of the spring showers.

About a third larger quantity of seeds are sown than the number of plants required, to allow for failure and so that at transplanting, weak spindling plants can be discarded, enough "stocky" ones being got to set the space to be covered. An ounce of seeds will produce about 5,000 plants and it will take twenty feet of row to sow it at the proper thickness.

The seeds germinate slowly, are the smallest the gardener uses, and the plant, at the beginning of its growth, is a frail, tiny, little thing. Any lumps of earth cast upon seeds or plants at this stage will certainly retard, if not effectually prevent growth.

The seeds are sown in a well-pulverized rich border (good results are obtained by sifting the soil through a coarse wire sieve) in the open ground, as early in the season as the soil can be worked. A fine moist place should be selected, as free from weed seed as possible. Where growing largely, seeds are planted at different times ; say about two weeks apart, so as to have fresh plants coming on. When the bed is properly prepared, lay a board across one end and walk on it to firm

the soil, then move the board slightly to one side and with the point of a trowel or sharp stick, make a very slight mark along the edge of the board, in which sow the seeds, be careful not to sow too thick, which would cause the plants to grow spindling. After the seeds are sown cover lightly with the back of the rake, replace the board and walk on as before to thoroughly firm the soil, which is of great importance to the perfect germination of the seeds and strong plants. Proceed with other rows in the same manner, leaving a distance of ten or twelve inches between. The bed should not be allowed to get very dry, and always kept free from weeds. If very early celery is desired, the seeds should be sown in hot beds, and transplanted as soon as the weather will warrant.

As seedling plants are rather troublesome to raise, when for private use only, and as they can usually be purchased cheaper than they can be raised on a small scale, it is scarcely worth while to sow the seeds. But when wanted in quantities, the plants should always be raised by the grower, as celery plants are not only difficult to transplant, but are usually too expensive to buy when the crop is grown for market.

## TRANSPLANTING.

When the ground is properly prepared, stretch a line to the distance required, walk on it or beat it slightly with a spade so that it leaves a mark to show where to place the plants. Select from the bed the largest plants, so that the row will be uniform. The tops should have been shorn off once or twice previous to transplanting, so as to insure "stocky" plants, which suffer less on being set out ; the root is trimmed with a knife, cutting off enough so the root can be put down in the hole made by the dibber without doubling up, which is very detrimental to the growth of the plant.

Set out at a distance of six inches between the plants ; if only one crop is to be reised the distance between the rows need be only four feet, and when grown for winter use, from two to three feet between are sufficient, when two crops are to be grown the distance between the rows should be about five feet, the second setting is put in half way between these rows, and by the time the second setting is ready to be hilled up the first crop is ready to come out, and the soil used for first crop can now be used for the second.

Great care must be taken in putting out the celery, to see that the plant is set just to the depth of the roots, if much deeper, the heart might be

too much covered up which would impede the growth. It is also important when planting to see that the soil be well packed to the roots, this is done by returning on each row, after planting, and pressing the soil against each plant firmly with the feet. This packs the soil, and partially excludes the air from the roots until new rootlets are formed, which will usually be in forty-eight hours, after which all danger will be over. In case of drought after setting, plants should be liberally watered. It is a good plan to do the setting as far as possible after sun-down; if done at this time no further attention will be required, particularly if the soil has been freshly dug or plowed. After the plants are fairly started no attention need be given them, further than to keep clear of weeds until the time of

## HANDLING.

The process of handling consists in drawing the earth to each side of the celery and pressing it tightly to it in order to give the leaves an upward growth. This causes a new growth of stalks to start, the best for eating. From three to four weeks after the handling it is ready for the

## BLANCHING.

It is necessary to use judgment about hilling up, as it will not do to commence while the

weather is too hot and wet, as there is danger of its rotting.

Much of the "banking up" work can be done with a small plow where the land will permit of its use, if it will not, the soil is piled up along the row with a spading fork or spade and then brought up carefully with a hoe; or, what is better if the soil is fine and mellow, is to take a barrel stave, saw in two in the middle, and whittle down one end of each to the right size to handle conveniently, take one in each hand, stand astride the row and with these the soil can be brought up to the row rapidly and nicely, without fear of bruising the plants. In handling and earthing up care should be taken to keep the stalks of the plant so close together that no soil can get between them. The bank should be heightened two or three times by heaping up fresh soil as the celery grows, so as to keep the new stalks, started by the handling process, from the light, the older stalks will blanch at the same time. The bank must be made broad at the base, and the sides sloped up nicely, so that they will not cake or slide.

It takes, after the last hilling, but from eight to ten days in warm weather and from four to five weeks in cold weather to blanch celery.

Another plan of blanching, in warm weather, is to tie up the plants with yarn or other convenient material, throw up a small ridge of soil on

each side of the row, just up to the plants, but not much against them, with a hoe or small one-horse plow—if a horse can be used, then take inch boards twelve inches wide, lay along on each side of the row, crowding the lower edge close up to the bottom of the plants, fastening them there with stout pegs driven on the outside of each board, then take hold of the outer edges of the boards and bring them up together, placing over them clamps or hooks made of wire—so constructed that the boards will be about two inches apart, or a little more, if the celery is large. By this method much labor is saved, and celery so treated is less liable to rust and rot, though it is apt to make the celery taste strong, especially when new boards are used.

For late and winter crops the soil is found much the best for blanching.

## TAKING OUT.

The celery is taken up with a long tined spading fork, first throwing aside some of the soil, that the fork may run straight down close to the roots, which will enable it to be thrown out easily without injury to the plant.

When the Celery is to be prepared for market immediately : A second party—a boy will answer just as well, follows, pulling off the outside, rough leaves, and cutting off the roots, care should be exercised not to trim too close, they

can be cut square or cone shaped. If left with considerable "butt" on, celery will keep fresh longer, besides allowing of a slight peering down, after it has become blackened by age, thereby adding much too its good appearance, and gives the dealer a chance to "brush up" a somewhat unattractive article, which will enable him to make a sale where if this resort could not be had celery must be lost or greatly sacrificed.

## BUNCHING.

After being trimmed it is washed and tied in bunches of about twelve heads to the bunch. A convenient mode of doing this is to make a rack, similar to a saw buck, suitable size to hold one bunch. Lay in the celery and tie snugly with two strings, one around the top—the higher it is placed the longer the celery looks—and one at about two inches from the bottom, winding it twice around. When celery is a little below the average in length a good plan for improving the looks of bunches is by arranging in the same manner as a pyramid bouquet, putting the longer stalks on the outside and laying the shorter in the middle, so the tops of the shorter will protrude considerably above the outside or longer stalks. After a little practice it can be made to look quite respectable.

## STORING FOR WINTER.

Winter celery is not allowed to thoroughly bleach before taking out, but to complete the process in the trench, cellar or coop as the case may be. In taking out celery for storing, it should not be cut, trimmed or washed, nothing done whatever, except, perhaps, to pick off the dead outside leaves if there are any such.

**In The Ground.**—If the celery is to be left in the open ground where it was grown, then a heavy bank must be made on each side of the rows, and as the cold increases an additional covering of at least a foot of leaves or litter must be closely packed against the bank to protect it from frost. It is not safe to leave in the ground where it grows, in the above described manner, in latitudes where the temperature gets lower than ten degrees below zero.

**In Cellars.**—Perhaps the best way to keep celery for family use is to take shoe boxes, good ones, that will hold water when they are swelled, bore a small hole about two inches from the bottom in one end. Take the celery up with care and pack perpendicularly in the boxes with an inch or so of sand, muck or dirt on the bottom, leaving some of the earth on the roots, place the boxes in the cellar and with a tube or watering pot (with rose off) pour water down one corner of

the box until it flows out the hole. From time to time replenish the water, as it is absorbed and the stalks will blanch beautifully, remaining fresh and crisp until used. This arrangement prevents any bad results from too much water around the plants, or from getting it upon the stalks and foliage.

Boxes thus packed in November will be bleached fit for use during January, February and March. Though for successions it is better to put in the boxes, from open ground, at different times. If the boxes, however, are not at hand, the celery may be put away on the floor of the cellar in strips of eight or nine inches wide, divided by boards of a width equal to the height of the celery. The reason for dividing the celery in these narrow strips by boards is to prevent heating, which would occur if placed together in too thick masses.

**In Trenches.**—The ground in which it is to be preserved for winter use must be as dry as possible, and so arranged that no water can remain in the trench, or settle in at a thawing spell. It should be as narrow as possible (not wider than ten inches) and of depth sufficient to take in the celery, placed perpendicular. Commence at one end of trench, standing the celery as near upright as possible, and pack as closely together as can be done without bruising. No soil or sand must be

put between the stalks, though it is a good plan to place at intervals of three or four feet, boards, same height as celery, and same width as trench, this will prevent all danger of heating. Lay sticks across the trench, and on these short boards, they being more convenient when taking out the celery in small quantities than if long boards are used.

As the weather becomes cold, the trenches should be gradually covered with leaves or litter to the thickness of six or eight inches, sufficient to keep out frost and rain.

Another method now practiced is as follows: before the approach of very cold weather, the celery in the trenches is pressed somewhat closely together by passing a spade down deeply alongside of the trench on each side, but about three or four inches from the celery. It is best done by two men, so that they press against each other, thus firming the top of the celery in the trench until it is compact enough to sustain a weight of three or four inches of soil, which is taken from the side of the trench and spread over the celery. This earth covering keeps it fresher than the covering of litter, though on the approach of cold weather, it is not sufficient, and a covering of six or eight inches of leaves must yet be placed over the earth covering.

**Cooping**—Where celery is wanted daily in quantities, this is the most practical method of storing,

as it can be taken out handily in the severest weather, without danger of freezing. The coop or shed is built in the following manner: A pit is dug ( where no water will stand ) from one to two feet deep. This soil thrown out forms the wall on which the plates are laid for the rafters. This makes the walls frost proof. The roof is made of rough boards, and if severe cold weather comes on straw is thrown on the roof.

It is a good plan to have an old stove put up in which a fire can be started if needed, as it often will be if the coop door is opened much.

Railings are put in through the middle, leaving an alley of sufficient width for convenience. The celery is packed in these pits on each side, commencing at one end, standing it up against the bank, always pressing the roots up snug.

When three or four feet of space has been filled, a partition is put in by running a board across and tacking it to the railing, then proceed in the same way packing against this partition, and so on. These partition boards are to keep the tops from lopping over too heavy, causing it to heat.

## SHIPPING AND MARKETING.

For home marketing all that is necessary is tying in bunches, as elsewhere described. Some dealers prefer smaller bunches, which can be made

to special order, but a bunch of celery is generally understood as equaling twelve good sized roots.

Celery should be delivered as soon after making ready as possible. Quicker sales and better results are realized from fresh looking celery. For shipping purposes, boxes made of light pine lumber are used. The heads of one inch, and sides of one-half inch.

Below is given a table showing the different sized boxes used for shipping, reckoning as size of bunch twelve well developed plants, or their equivalent:

6 dozen	box 6 x 12 x 28 inches.
8 “	“ 6 x 16 x 28 “
10 “	“ 6 x 20 x 28 “
12 “	“ 6 x 24 x 28 “
16 “	“ 10 x 20 x 28 “
20 “	“ 10 x 24 x 28 “
25 “	“ 10 x 30 x 28 “

If more than twenty-five bunches are to be sent to one address it is better to use two or more boxes in preference to larger than these. To describe the method of packing; take for illustration a twelve bunch box: Lay six bunches on a side with “butts” against the ends of the box, the leafy portion of the celery meeting and overlapping in the center. If larger than a twelve bunch box is to be packed, the rows must be two deep, laying in alternately a row on each side.

If the foliage is very heavy it will be found a good plan to trim the bunch with a case knife just before packing, which saves considerable in expressage, prevents heating in warm weather, and does no damage in cool. However, in winter there is seldom any foliage to spare. No packing is necessary, though if the boxes are lined with straw paper it will keep celery moistened and fresh in warm weather. In the winter and cold season the box may be lined and each bunch wrapped in this paper, which will aid greatly in protecting it from frost.

## RUST.

This is probably caused by the condition of the weather, which destroys the tender fibers, or what is called the working roots of the plant. It is usually worse in seasons of extreme drought or moisture, particularly in warm weather. It is exceedingly necessary, however, to have the land thoroughly pulverized before planting, lack of this greatly increases the tendency to rust. It is liable to show signs of rust if left hilled up too long. Rust in celery is less apt to appear in new, fresh soils that are free from acids or sourness, than on old soils that have been surfeited with manure and have had no rest.

## **PITHY OR SOFT CELERY.**

Although, under ordinary conditions, if proper varieties of celery are used, the crop should never be pithy or hollow, yet, now and then even the most solid kinds have become more or less hollow when planted in soft, loose soils, such as reclaimed peat bogs, where the soil is composed mostly of leaf mould. In fact, on heavy or clayey soils the celery will be specifically heavier than that raised on lighter soils.

## **STRONG OR BITTER CELERY.**

This is due, principally, to prolonged wet, cold and cloudy weather, just before time for taking out. Celery not having bleached nicely is left hilled up, and becomes strong or bitter, sometimes to such an extent as to render it worthless for eating purposes, though it can be used nicely for soup and stews.

## **POINTS TO BE OBSERVED.**

**IN MAKING CELERY CULTURE PROFITABLE--SUITABLE  
SOIL, WELL IRRIGATED AND PROPERLY FITTED.**

It is important that celery should not be worked or touched while wet with rain or dew or while frost covered. This rule applies to its cul-

tivation in the seed bed, to the earthing process, and when storing for winter, but not in transplanting, as this is best done on a rainy day.

No earth must be permitted to get into the hearts.

Better pay twenty dollars per pound for reliable seeds than plant a poor quality received as a gift.

Avoid large quantities of fresh green manure, as it has a tendency to cause hollow, spongy celery.

Soil being left in contact with mature stalks too long will cause rust.

Celery's going to seed is often caused by too early planting or transplanting.

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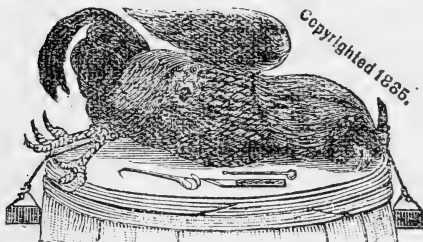
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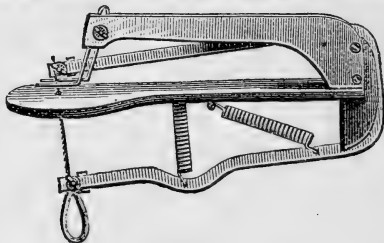
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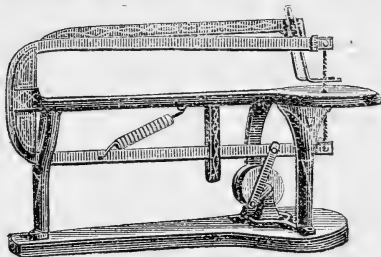
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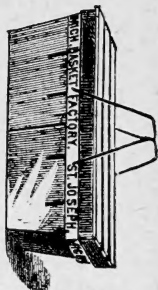
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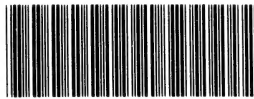
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